

## Cycolac\* Resin GHT3510

## Americas: COMMERCIAL

Automotive. High Heat family. High impact/intermediate heat resistance.

TYPICAL PROPERTIES 1	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	460	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Modulus, 5 mm/min	22400	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	790	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	24600	kgf/cm <sup>2</sup>	ASTM D 790
Hardness, Rockwell R	109	-	ASTM D 785
IMPACT			
Izod Impact, notched, 23°C	24	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	138	cm-kgf	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	106	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	98	°C	ASTM D 648
PHYSICAL			
Specific Gravity	1.05	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.8	%	GE Method
Melt Flow Rate, 220°C/10.0 kgf	4.5	g/10 min	ASTM D 1238
Melt Viscosity, 260°C, 1000 sec-1	2250	poise	ASTM D 3825

 Typical values only. Variations within normal tolerances are possible for variose colours. All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294. 2) Only typical data for material selection purpose.Not to be used for part or tool design.
3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:11/13/2001







## Cycolac\* Resin GHT3510 Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	UNIT	
Injection Molding			
Drying Temperature	95 - 100	°C	
Drying Time	2 - 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.01	%	
Melt Temperature	245 - 275	°C	
Nozzle Temperature	245 - 275	°C	
Front - Zone 3 Temperature	245 - 255	°C	
Middle - Zone 2 Temperature	225 - 240	°C	
Rear - Zone 1 Temperature	200 - 210	°C	
Mold Temperature	50 - 80	°C	
Back Pressure	0.3 - 0.7	MPa	
Screw Speed	30 - 60	rpm	
Shot to Cylinder Size	50 - 70	%	
Vent Depth	0.038 - 0.051	mm	

 Typical values only. Variations within normal tolerances are possible for variose colours. All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294. 2) Only typical data for material selection purpose.Not to be used for part or tool design.
3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:11/13/2001